

Application Number 10/698,095  
Responsive to Office Action mailed April 18, 2007

### **REMARKS**

This paper is responsive to the Office Action mailed April 18, 2007. Claims 1–30 remain pending. Reconsideration of the application in light of the following remarks is respectfully requested.

#### **Objections to the Drawings**

In the Office Action, the drawings were objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the reference character(s) not mentioned in the description: (800) as seen in Figure 8.

Applicant respectfully directs the Examiner's attention to Applicant's Amendment dated January 5, 2007. In that Amendment, paragraph [0052] of the specification was amended by replacing the phrase "the valve 801" with the phrase "flow control device 800" (see page 2 of Applicant's Amendment dated January 5, 2007). The specification has thus been amended to include reference character 800. Applicant therefore respectfully requests that the objection to the drawings as failing to comply with 37 CFR 1.84(p)(5) be withdrawn.

#### **Allowable Subject Matter**

In the Office Action, claims 2 and 17 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant thanks the Examiner for this indication of allowable subject matter.

#### **Claim Rejection Under 35 U.S.C. § 103**

In the Office Action, claims 1, 3–11, 13–13, 16, 18–21, 24 and 26–30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bertrand et al. (US 2002/0022793, "Bertrand") in view of Haynor et al. (US 6,216,028, "Haynor"). Claims 12 and 22–23 under 35 U.S.C. 103(a) were rejected as being unpatentable over the combination of Bertrand and Haynor as applied to claims 11 and 21 above, in view of Drinan et al. (US 2003/0004403, "Drinan").

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Applicant respectfully traverses these rejections. The applied references fail to disclose or suggest the inventions defined by Applicant's claims, and provide no teaching that would have suggested the desirability of modification to arrive at the claimed invention.

To establish a prima facie case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations.<sup>1</sup> Applicant respectfully submits that the Office Action has failed to meet at least this basic criteria required to establish a prima facie case of obviousness. Namely, the references Bertrand and Haynor, either alone or in combination, do not teach or suggest all of the limitations recited in at least Applicant's independent claims 1, 16 and 26 as required to establish a prima facie case of obviousness under 35 U.S.C. §103.

***Independent claim 1***

Applicant's independent claim 1 requires an electronic magnetic-based indicator tool comprising a plurality of magnetic field sensors, the plurality of magnetic field sensors grouped into sets of magnetic field sensors to determine spatial location and orientation of a magnetic indicator device associated with a valve of an implantable flow control device, and a processing module that receives magnetic data values from the plurality of magnetic field sensors and determines a setting for the valve on the implantable flow control device using the determined orientation of the magnetic indicator device.

The Office Action argued that it would have been obvious for one of ordinary skill in the art to combine the electronic magnetic indicator tool of Haynor with the "control system" of Bertrand to arrive at these requirements of Applicant's claim 1.<sup>2</sup>

Applicant respectfully disagrees. Bertrand teaches a compass based indicator tool for assessing the position of a fluid flow valve within an implanted device. The indicator tool of Bertrand uses a compass 62 to estimate a setting of a valve of an implantable medical device (IMD).<sup>3</sup> The device of Haynor uses magnetic sensors 108-114 to electronically determine the

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<sup>1</sup> MPEP 706.02(j).

<sup>2</sup> Office Action dated April 18, 2007, page 5.

<sup>3</sup> Applicant's specification at page 2, ¶ [0006]; Bertrand, ¶¶ [0053], [0056].

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location of an IMD attached to a medical tube.<sup>4</sup> Applicant respectfully submits that the combination of Bertrand and Haynor fails to teach each and every element of at least Applicant's independent claim 1.

For example, Bertrand fails to teach or suggest a processing module that receives magnetic data values from the plurality of magnetic field sensors and that determines a setting for a valve on an implantable flow control device using a determined orientation of a magnetic indicator device, as required by both claim 1. The Office Action compares index 88 of Bertrand to Applicant's claimed "processing module." However, Applicant respectfully submits that index 88 of Bertrand is not analogous to Applicant's claimed processing module. Index 88 does not receive magnetic data values and index 88 does not determine a setting for the valve as recited in Applicant's claim 1. Index 88 is merely affixed to the surface of the indicator body, and may include printed values to which pointer 84 points.<sup>5</sup> As such, index 88 merely indicates the possible positions of the mechanism of the adjustable valve 10 corresponding to the different settings of the valve 10. Therefore, Bertrand fails to teach or suggest a processing module that either receives data from the plurality of magnetic field sensors. As a result, Bertrand can not and does not teach or suggest a processing module that determines a setting for a valve on an implantable flow control device using a determined orientation or a magnetic indicator device, as required by Applicant's claim 1.

Haynor likewise fails to teach or suggest the processing module required by Applicant's claim 1. As described in Applicant's specification, medical tube devices, such as that taught by Haynor, are not suited for use with implantable flow control devices.<sup>6</sup> The device of Haynor is not intended for use with implantable flow control devices, but instead is intended for use with medical tubes.<sup>7</sup> Thus, there would be no reason for the device of Haynor to include a processing module such as that recited in independent claim 1. Therefore, even if Bertrand and Haynor were combined, the combination likewise would fail to teach, suggest, or disclose the processing module required by Applicant's independent claim 1.

<sup>4</sup> Haynor, col. 3, ll. 53-64.

<sup>5</sup> See, e.g., Bertrand, FIG. 9 and ¶¶ [0058] - [0060].

<sup>6</sup> See, e.g., Applicant's specification, ¶¶ [0005], [0031].

<sup>7</sup> Haynor, col. 3, ll. 53-64.

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For at least these reasons, Bertrand and Haynor, either alone or in combination fail to teach each and every element recited in Applicant's independent claim 1.

***Independent claims 16 and 26***

Although discussed primarily with respect to Applicant's independent claim 1, Applicant's other independent claims, namely claims 16 and 26, include similar requirements to which similar arguments apply. For example, claim 16 requires an electronic magnetic-based indicator tool comprising a plurality of magnetic field sensors, the plurality of magnetic field sensors grouped into sets of three magnetic field sensors and a processing module that receives magnetic data values from the plurality of magnetic field sensors and determines a setting for the valve on the implantable flow control device using a determined orientation of the magnetic indicator device coupled to the valve. Claim 26 requires placing an electronic magnetic-based indicator tool adjacent to an implantable medical device, the implantable medical device having a magnetic indicator device coupled to a valve used to control operation of the medical device and determining an orientation of the magnetic indicator device relative to a known position of the implantable medical device using the observed magnetic field and an estimate for the environmental magnetic field. Thus, for at least the reasons discussed above with respect to claim 1, claims 16 and 26 are also patentable over the combination of Bertrand and Haynor.

***Dependent claims 2-15, 17-25 and 27-30***

Claims 2-15, 17-25 and 27-30, are dependent upon claims 1, 16 and 26, respectively, and thus include all of the limitations thereof. For at least these reasons, the Office Action has failed to establish a prima facie case for non-patentability of Applicant's claims 1-30 under 35 U.S.C. § 103(a). Applicant respectfully requests withdrawal of this rejection.

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### CONCLUSION

All claims in this application are in condition for allowance. Applicant respectfully requests reconsideration and prompt allowance of all pending claims. Please charge any additional fees or credit any overpayment to deposit account number 50-1778. The Examiner is invited to telephone the below-signed attorney to discuss this application.

Date:

August 16, 2007  
SHUMAKER & SIEFFERT, P.A.  
1625 Radio Drive, Suite 300  
Woodbury, Minnesota 55125  
Telephone: 651.286.8357  
Facsimile: 651.735.1102

By:

Kari H. Bartingale  
Name: Kari H. Bartingale  
Reg. No.: 35,183